On page 15, please replace the paragraph from line 24 through line 32, in its entirety, with the following:

The structure of the x-y addressible, passive photodiode matrix (2D image sensor 30) is depicted in Fig. 3. Shown in Fig. 4 is the structure of a full-color image sensor 40 made with the x-y addressable photodiode matrix. In these devices, the anode and cathode electrodes 11', 13' are typically patterned into rows and columns perpendicular to one another. Patterning of the photoactive layer 12 is not necessary for pixels with sufficient space between adjacent electrodes. Each intersection of the row and column electrodes defines a photosensitive element (pixel) with device structure similar to that shown in Fig. 1 or Fig. 2. The widths of the row and column electrodes 11', 13' define the active area of each pixel.

In the Claims:

Please cancel Claims 1-12 and 14.

REMARKS

Claims 1-38 re pending. Claims 1-12 and 14 are cancelled without prejudice, since these claims have been examined and allowed in co-pending application number 09/241,660 filed February 2, 1999, the parent application of the above-referenced case.

The specification has been amended to correct obvious typographical errors.

In light of these amendments it is believed that this application is now allowable.

Applicants invite the Examiner to call the undersigned attorney should there be any remaining issues.

Respectfully submitted,

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DATE: Dec 16 2001

VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Title:

On page 1 please replace the title with the following:

ORGANIC DIODES WITH SWITCHABLE PHOTOSENSITIVITY USEFUL IN PHOTODETECTORS

In the Specification:

On page 12, the paragraph from line 17 through line 25:

The device structure of the linear photodiode array is shown in Fig. 19. Transparent glass or PET films can be used as the substrates. Opaque materials such as silicon wafers can also be used as the substrate material. In this case, the light is incident onto the free surface side as shown in Fig. 20B [19B]. When organic PET films are used as substrates, the linear diode array can be made in flexible form. Optical devices with curved surface can also be used as the substrate for these diode arrays; i.e., the linear dioide array can be coupled to and integrated with other optical devices in a desired optical arrangement and with a desired optical wavefront.

On pages 12-13, the paragraph from page 12 line 26 through page 13 line 16:

Linear photodiode arrays can be made in the configurations similar to that shown in Fig. 3 with one row and n columns or with one column and n rows. The cross sectional views of two typical device structures are shown in Fig. 19. The substrates can be transparent or opaque. In a preferred configuration (Fig. 20A[19A]), the linear photodiode arrays (210) can be fabricated onto a transparent glass substrate (214) with patterned ITO (211) or other transparent electrode materials (such as conducting polymer electrodes, thin metal films, metal/conducting polymer bilayer electrodes, dielectric film/ITO or metal film/dielectric film bilayer electrodes). The process of ITO patterning is well known in the existing art, and has been used broadly in LCD technologies. The deposition of the organic layer (212) can be achieved by spin casting, drop

casting, printing, electrochemical synthesis or vapor deposition. The back electrode, in the form of a narrow bar shape (213), can be vacuum deposited with a simple shadow mask or patterned by means of photolithography. In most applications (especially for larger pixel sizes), no patterning of the sensing material is necessary. This sensing array can be mounted onto a print circuit (PC) board with a driving circuit. Several existing connection techniques (such as card-edge connectors, zebra connectors, bonding tapes, wire bonding, soldering bumper etc.) can be used for interboard connection. The drive circuits can also be arranged (surrounding the sensor array) onto the same substrate. This is especially preferred in arrays with a high pixel density (e.g., > 80 pixels/inch). In these cases, the IC chips can be bonded to the glass substrate, and the electrical connections can be achieved via soldering, one-dimensional conducting epoxy or other existing connection technologies.

On page 15, the paragraph from line 24 through line 32:

The structure of the x-y addressible, passive photodiode matrix (2D image sensor 30) is depicted in Fig. 3. Shown in Fig. 4 is the structure of a full-color image sensor 40 made with the x-y addressable photodiode matrix. In these devices, the anode and cathode electrodes 11', 13' are typically patterned into rows and columns perpendicular to one another. Patterning of the photoactive layer 12 [13] is not necessary for pixels with sufficient space between adjacent electrodes. Each intersection of the row and column electrodes defines a photosensitive element (pixel) with device structure similar to that shown in Fig. 1 or Fig. 2. The widths of the row and column electrodes 11', 13' define the active area of each pixel.